

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: HALO

Report Number: P851812

Luminaire Tested: RLFRC4FS-2700K

Issue Date: 7/3/2024

Test Information

Test Method: LM-79-2019
Report Number: P851812
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (UTC2404001E-A1)
Test Lab: INNOVATION CENTER
Issue Date: 7/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: RLFRC4FS-2700K
Description: 4" Fire Rated Canless, 2700K CCT 900lms,WH
Light Source: -
Ballast/Driver:

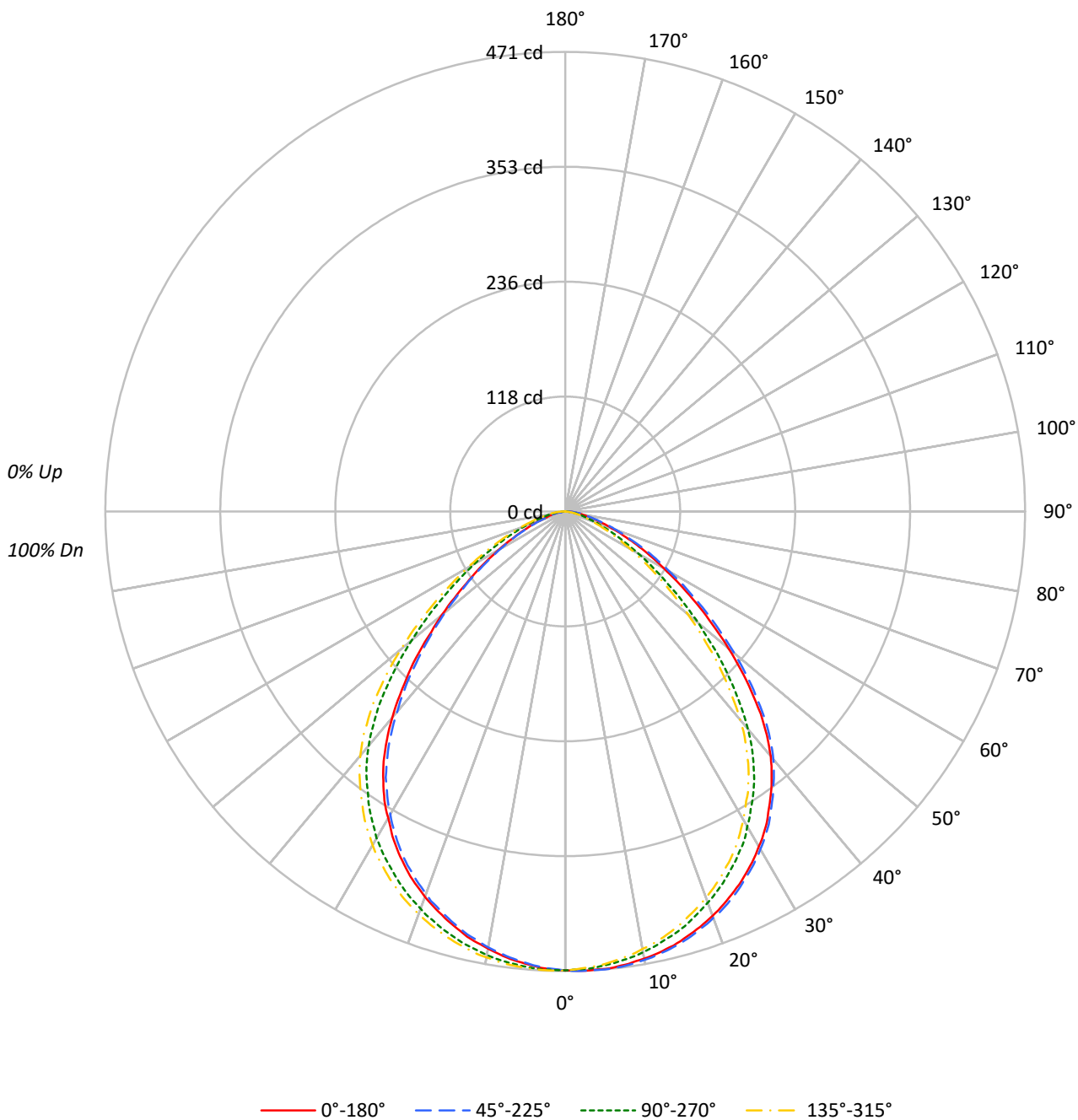
Summary

Lumens per Lamp: 1009.3 (1 lamp)
Luminaire Lumens: 988.0 lumens
Efficiency: 97.9%
Efficacy: 92.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.26
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 10.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P851812
CATALOG NUMBER: RLFRC4FS-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P851812
 CATALOG NUMBER: RLFRC4FS-2700K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	117	117	117	117	114	114	114	114	109	109	109	104	104	104	100	100	100	98				98
1	108	105	101	98	106	102	99	96	98	96	93	95	93	91	91	89	88				86	
2	100	93	88	83	98	92	86	82	88	84	80	85	81	78	82	79	77				75	
3	92	84	77	71	90	82	76	71	79	74	69	77	72	68	74	70	67				65	
4	85	75	68	62	83	74	67	61	72	65	61	69	64	60	67	63	59				57	
5	79	68	60	54	77	67	60	54	65	58	53	63	57	53	61	56	52				50	
6	74	62	54	48	72	61	53	48	59	53	48	58	52	47	56	51	47				45	
7	69	56	49	43	67	56	48	43	54	48	43	53	47	42	52	46	42				40	
8	64	52	44	39	63	51	44	39	50	43	39	49	43	38	48	42	38				36	
9	60	48	40	35	59	47	40	35	46	40	35	45	39	35	44	39	35				33	
10	56	44	37	32	55	44	37	32	43	36	32	42	36	32	41	36	32				30	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	59187	59187	59187	59187
5°	59439	58984	58782	59148
10°	59474	58618	58132	58988
15°	59399	58057	57301	58604
20°	59075	57160	56303	58030
25°	58585	55988	54836	57210
30°	57648	54204	52678	56151
35°	56092	51867	49931	54141
40°	53803	47856	45277	51438
45°	49140	41807	39173	46595
50°	42760	34928	32187	40156
55°	35984	27821	25540	33285
60°	29399	22049	19758	26982
65°	24091	16765	14860	21083
70°	18876	12842	10450	16301
75°	15317	9676	8023	12302
80°	13045	8045	6088	10726
85°	12418	4187	0	9097

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 52575 cd/sqm



TEST NUMBER: P851812
 CATALOG NUMBER: RLFRC4FS-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	44.4	4.5	4.4
10°-20°	126.2	12.8	12.5
20°-30°	187.7	19.0	18.6
30°-40°	214.7	21.7	21.3
40°-50°	190.7	19.3	18.9
50°-60°	126.7	12.8	12.5
60°-70°	65.4	6.6	6.5
70°-80°	25.9	2.6	2.6
80°-90°	6.3	0.6	0.6
90°-100°	0.1	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	358.3	36.3	35.5
0°-40°	573.0	58.0	56.8
0°-60°	890.4	90.1	88.2
0°-90°	987.9	100.0	97.9
90°-120°	0.1	0.0	0.0
90°-150°	0.1	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	988.0	100.0	97.9

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	470	470	470	470	470	
5°	470	467	465	468	470	45
15°	456	446	440	450	456	129
25°	422	403	395	412	422	194
35°	365	338	325	352	365	228
45°	276	235	220	262	276	212
55°	164	127	116	152	164	147
65°	81	56	50	71	81	81
75°	32	20	16	25	32	34
85°	9	3	0	6	9	9
90°	2	0	0	0	2	1
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P851812
 CATALOG NUMBER: RLFR4FS-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3
1°	470.6	470.7	471.0	471.5	469.8	470.1	469.7	469.8	469.8	469.5	469.5
2°	471.0	470.8	471.1	472.0	469.4	469.2	468.6	469.0	469.4	468.9	468.7
3°	471.0	470.9	471.1	472.1	469.1	468.7	467.7	468.1	468.3	468.3	467.5
4°	470.6	470.7	470.9	472.2	468.1	467.6	466.8	466.9	466.8	467.2	466.2
5°	470.5	470.0	471.1	472.7	466.9	466.8	465.6	465.5	465.3	465.5	464.4
6°	470.2	469.8	470.7	472.1	465.8	465.1	463.7	464.6	463.7	464.1	462.6
7°	469.0	469.1	470.1	471.9	464.1	463.6	461.9	462.6	462.1	462.3	460.6
8°	468.0	467.9	469.2	471.3	462.7	461.7	460.1	461.1	459.9	460.3	458.4
9°	466.5	466.5	468.1	470.5	461.0	460.0	458.1	458.8	457.5	457.9	456.1
10°	465.4	464.9	466.8	469.2	458.7	457.8	455.3	456.2	454.9	456.1	453.7
11°	464.0	463.3	465.5	467.9	456.5	455.3	453.2	454.2	452.1	452.9	450.6
12°	462.3	461.8	463.7	466.4	454.0	452.7	450.6	451.3	450.0	450.0	447.6
13°	460.2	459.7	461.9	465.1	451.0	449.7	447.6	448.7	447.1	447.4	445.0
14°	458.4	457.5	460.0	463.0	448.6	446.5	444.4	445.2	443.3	444.1	441.3
15°	455.9	455.1	457.8	460.7	445.6	443.8	441.1	441.9	439.8	440.9	437.7
16°	453.0	452.6	455.4	458.9	442.5	440.0	437.7	438.2	436.4	437.1	433.9
17°	450.5	449.5	452.7	456.5	438.7	436.7	433.4	434.8	432.2	433.2	430.0
18°	447.5	446.7	449.6	453.7	434.7	432.4	429.7	431.1	428.5	429.4	425.7
19°	444.5	443.7	446.8	450.6	430.8	428.2	425.7	427.2	424.5	425.3	422.3
20°	441.1	440.1	443.4	447.9	426.8	423.8	421.2	423.0	420.4	420.7	416.9
21°	437.8	436.6	440.4	444.5	422.8	419.7	416.9	418.5	415.2	416.3	412.1
22°	433.8	432.9	436.9	441.3	418.0	415.3	412.1	413.6	411.0	411.6	407.4
23°	429.8	428.8	432.7	437.6	413.6	410.8	407.5	408.9	406.2	407.0	401.8
24°	425.7	424.8	428.8	433.4	408.5	405.4	401.5	403.5	400.6	402.0	396.9
25°	421.9	420.3	424.5	429.8	403.2	400.5	396.7	398.0	394.9	395.9	391.3
26°	417.1	415.4	419.3	425.4	398.1	394.5	390.9	392.7	389.2	391.2	385.2
27°	412.3	410.9	415.0	421.1	392.2	388.8	385.3	387.3	383.2	384.5	379.0
28°	407.4	405.9	410.3	416.3	387.1	382.7	378.6	380.2	376.9	377.6	372.2
29°	402.3	400.9	405.5	411.3	380.7	376.3	371.7	374.0	369.4	371.6	365.7
30°	396.7	395.6	399.8	406.4	373.0	368.6	364.7	367.1	362.5	364.3	358.2
31°	391.4	389.6	394.4	400.5	366.4	362.4	357.7	360.3	356.4	357.6	351.6
32°	385.3	383.1	388.6	395.3	358.9	354.8	349.8	353.0	349.3	350.9	343.8
33°	379.5	376.5	382.7	389.6	352.3	348.3	343.6	346.1	341.4	342.8	336.0
34°	372.0	369.8	375.5	383.5	345.0	340.4	335.4	339.3	333.2	335.5	328.8
35°	365.1	362.3	368.5	377.0	337.6	332.5	327.6	330.1	325.0	326.6	319.0
36°	358.3	355.1	361.7	369.6	328.9	323.8	318.7	322.0	316.3	318.4	309.9
37°	351.2	347.8	354.0	362.6	320.3	314.3	309.2	312.2	306.4	308.7	300.4
38°	343.1	340.7	347.0	355.4	311.5	305.5	299.8	303.1	296.7	298.4	289.8
39°	335.8	332.6	339.5	347.9	301.6	296.2	290.2	293.7	286.2	287.8	279.3
40°	327.5	324.3	331.7	340.2	291.3	285.2	278.5	283.2	275.6	277.4	267.8
41°	318.1	315.5	322.9	332.4	280.6	274.2	267.6	272.2	264.6	265.8	257.3
42°	308.8	304.9	313.7	324.4	269.3	262.2	255.8	260.4	252.8	254.9	246.2
43°	298.5	294.7	304.2	314.7	257.5	251.3	244.9	249.5	241.4	244.7	235.7
44°	288.3	284.1	293.8	305.3	246.3	238.9	233.1	237.9	231.0	232.8	223.4



TEST NUMBER: P851812
 CATALOG NUMBER: RLFRC4FS-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	276.1	273.1	282.6	295.4	234.9	228.7	221.8	226.6	220.1	222.0	212.3
46°	265.1	261.2	271.3	284.6	223.4	215.9	210.5	214.0	208.2	210.7	201.9
47°	253.8	250.4	260.5	272.6	212.4	204.7	197.1	202.8	196.7	199.0	190.6
48°	241.6	239.0	248.7	262.0	199.7	192.3	186.4	191.8	184.6	188.4	180.5
49°	230.2	227.9	237.8	250.8	188.1	180.8	174.8	180.5	174.9	178.3	169.9
50°	218.4	215.2	226.4	238.3	178.4	170.9	164.1	169.8	164.4	168.7	160.1
51°	207.4	204.2	215.3	227.4	166.9	160.1	153.9	159.0	154.3	157.7	149.3
52°	195.4	193.6	203.3	216.7	156.9	148.9	143.9	148.5	144.1	147.0	140.1
53°	184.4	183.3	193.3	205.0	146.7	139.3	133.6	138.6	134.8	138.6	130.5
54°	174.6	172.4	182.3	193.6	136.4	129.3	124.9	129.7	124.6	129.3	122.3
55°	164.0	162.0	171.6	182.8	126.8	120.6	115.2	119.8	116.4	120.9	113.6
56°	153.9	152.2	161.7	172.3	118.6	111.5	107.3	112.2	109.0	111.8	104.9
57°	143.9	142.0	151.3	162.4	109.4	103.4	99.3	104.0	100.6	103.4	97.4
58°	135.0	133.1	142.5	151.3	102.6	96.0	91.1	95.8	92.5	96.3	89.4
59°	125.2	124.5	132.6	141.7	94.5	88.1	84.0	88.0	85.5	88.5	83.1
60°	116.8	115.7	124.0	131.9	87.6	81.4	77.7	80.6	78.5	81.4	76.3
61°	109.2	108.2	115.7	123.5	80.0	74.7	70.8	74.6	72.4	75.1	69.5
62°	101.5	100.3	107.9	115.5	72.9	68.2	64.6	68.2	66.3	68.6	63.4
63°	94.4	93.4	100.7	107.4	67.1	62.0	59.3	62.3	58.9	62.2	57.9
64°	87.2	86.1	93.0	99.5	62.1	57.3	52.9	55.9	54.6	56.2	52.1
65°	80.9	79.1	86.0	91.4	56.3	52.0	49.3	51.1	49.9	51.4	47.3
66°	74.5	73.2	79.0	85.1	51.4	48.2	44.2	47.3	44.0	46.7	43.1
67°	67.5	67.9	72.4	78.4	46.9	42.2	39.8	41.9	39.9	41.5	38.4
68°	62.4	61.9	66.5	72.1	41.1	38.5	36.4	38.0	35.9	38.1	34.3
69°	57.3	56.2	61.5	65.7	37.9	35.0	32.4	34.1	31.8	33.5	30.3
70°	51.3	51.7	55.6	60.4	34.9	31.6	28.8	29.9	28.4	29.6	26.8
71°	47.7	47.2	51.1	55.0	30.7	28.0	25.9	27.1	25.0	26.3	23.5
72°	42.8	42.1	46.4	50.1	27.2	24.8	22.8	23.9	22.0	23.1	21.0
73°	38.9	37.9	41.5	45.5	24.5	22.2	20.5	21.3	19.5	20.7	18.7
74°	34.9	34.0	37.3	40.9	21.8	20.1	18.7	19.2	18.0	18.5	17.1
75°	31.5	31.0	33.7	36.8	19.9	18.1	16.6	17.7	16.5	16.8	15.3
76°	28.1	27.8	30.0	33.1	18.1	16.6	15.9	16.1	14.4	15.1	13.5
77°	24.8	24.3	26.9	29.6	16.7	15.1	13.9	13.8	13.2	12.8	12.5
78°	21.5	21.2	23.1	26.8	14.1	12.8	11.2	12.3	11.4	11.5	9.9
79°	19.4	19.7	20.8	23.6	12.8	11.5	10.2	10.4	9.6	10.1	8.7
80°	18.0	17.3	19.3	21.3	11.1	8.9	9.2	8.9	8.4	8.7	4.3
81°	16.3	16.2	17.5	19.0	9.4	8.1	7.1	7.4	6.3	7.4	5.3
82°	15.0	14.3	15.7	18.0	8.3	6.7	5.4	6.2	5.1	5.1	3.6
83°	12.8	13.4	14.4	15.5	6.0	5.4	3.3	4.9	3.7	3.5	2.0
84°	10.1	10.4	12.1	13.6	4.3	3.4	2.3	3.2	2.0	2.2	0.0
85°	8.6	9.2	10.8	12.1	2.9	1.8	1.1	2.1	0.0	1.0	0.0
86°	7.8	7.7	8.6	10.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87°	6.7	6.5	7.2	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	5.5	4.7	6.3	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89°	4.3	3.1	4.5	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P851812
 CATALOG NUMBER: RLFRC4FS-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	2.2	2.0	2.6	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	1.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P851812
 CATALOG NUMBER: RLFRC4FS-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P851812
CATALOG NUMBER: RLFRC4FS-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P851812
 CATALOG NUMBER: RLFRC4FS-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	470.3	470.3	470.3	470.3	470.3	470.3
1°	469.5	470.1	470.7	470.6	470.7	470.6
2°	468.1	470.0	470.9	470.6	470.3	471.0
3°	467.0	470.0	470.6	470.5	470.1	471.0
4°	465.4	469.1	469.9	470.2	469.9	470.6
5°	463.5	468.2	469.5	469.4	469.4	470.5
6°	461.5	467.2	468.3	468.7	468.8	470.2
7°	459.0	466.2	467.5	468.0	467.5	469.0
8°	456.7	464.9	466.2	467.0	466.9	468.0
9°	454.2	463.5	464.8	465.5	465.2	466.5
10°	451.7	461.6	463.3	464.1	463.6	465.4
11°	448.6	459.5	461.7	462.9	462.0	464.0
12°	445.5	457.4	459.5	460.9	460.1	462.3
13°	442.4	455.3	457.6	458.3	457.9	460.2
14°	438.9	452.6	454.6	456.3	455.8	458.4
15°	435.1	449.8	452.1	453.9	453.2	455.9
16°	430.7	446.9	449.2	451.3	450.7	453.0
17°	426.6	443.9	446.7	448.3	447.6	450.5
18°	422.4	440.3	443.5	445.6	444.5	447.5
19°	417.9	437.4	440.0	442.4	441.3	444.5
20°	412.9	433.3	436.5	438.9	438.2	441.1
21°	408.3	429.4	432.8	435.7	434.2	437.8
22°	402.8	425.7	428.9	431.9	430.6	433.8
23°	397.8	421.3	425.0	428.2	426.5	429.8
24°	392.3	416.9	420.7	423.6	422.7	425.7
25°	386.0	412.0	416.5	419.4	418.3	421.9
26°	379.7	407.0	411.2	414.9	413.2	417.1
27°	372.7	402.2	406.5	409.9	409.0	412.3
28°	365.8	397.2	402.0	405.1	403.7	407.4
29°	358.8	391.8	396.6	400.4	398.3	402.3
30°	351.8	386.4	390.7	394.7	393.2	396.7
31°	344.8	379.5	385.3	388.6	387.4	391.4
32°	337.2	373.3	379.4	383.1	381.0	385.3
33°	328.2	366.8	372.2	377.0	374.4	379.5
34°	320.0	360.2	365.7	370.2	367.6	372.0
35°	310.6	352.4	358.7	363.0	360.6	365.1
36°	301.3	345.5	352.0	356.0	353.5	358.3
37°	291.1	338.4	344.1	349.4	346.1	351.2
38°	279.3	330.5	336.5	342.2	338.8	343.1
39°	269.5	322.1	329.5	334.4	331.4	335.8
40°	257.7	313.1	320.1	326.4	322.2	327.5
41°	247.7	304.0	311.4	317.7	312.8	318.1
42°	235.6	293.2	301.9	308.8	303.6	308.8
43°	224.1	283.4	292.5	297.8	293.1	298.5
44°	212.4	273.4	281.0	288.1	281.7	288.3



TEST NUMBER: P851812
 CATALOG NUMBER: RLFRC4FS-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	200.8	261.8	270.7	277.7	271.1	276.1
46°	190.6	250.4	259.7	265.7	259.0	265.1
47°	180.5	239.3	248.7	254.6	247.5	253.8
48°	168.9	228.4	236.3	243.2	236.3	241.6
49°	159.0	216.0	225.1	231.9	224.7	230.2
50°	149.1	205.1	213.5	219.4	212.9	218.4
51°	139.1	194.0	201.2	208.0	201.1	207.4
52°	129.9	183.4	190.2	197.3	189.9	195.4
53°	121.2	172.2	179.6	185.0	178.8	184.4
54°	113.1	161.4	169.0	174.2	168.4	174.6
55°	105.1	151.7	157.7	163.5	157.5	164.0
56°	97.2	141.6	147.5	153.6	147.4	153.9
57°	89.1	132.1	138.3	142.7	138.0	143.9
58°	82.4	123.6	128.7	133.0	128.4	135.0
59°	75.9	115.2	119.9	124.6	120.0	125.2
60°	69.4	107.2	111.5	115.3	112.1	116.8
61°	63.2	99.2	103.5	107.2	104.1	109.2
62°	57.6	91.4	95.3	99.3	95.9	101.5
63°	51.5	83.7	88.2	92.6	88.7	94.4
64°	47.5	77.7	81.0	85.2	82.4	87.2
65°	42.5	70.8	74.0	78.0	75.9	80.9
66°	38.2	65.3	68.4	72.2	69.7	74.5
67°	33.9	59.0	62.6	66.4	63.7	67.5
68°	29.7	53.5	57.4	59.6	58.4	62.4
69°	27.2	48.8	51.7	55.0	52.9	57.3
70°	23.6	44.3	47.1	50.3	48.9	51.3
71°	20.9	40.1	42.7	45.7	43.3	47.7
72°	18.8	35.7	38.5	40.4	40.0	42.8
73°	16.9	32.0	34.3	36.7	35.8	38.9
74°	15.2	28.0	30.9	33.8	32.7	34.9
75°	13.3	25.3	27.5	29.7	29.3	31.5
76°	12.0	22.6	24.1	27.1	25.8	28.1
77°	9.8	19.7	21.2	24.0	23.6	24.8
78°	9.2	17.9	19.2	21.1	20.1	21.5
79°	7.2	16.1	17.3	19.1	18.5	19.4
80°	5.4	14.8	16.0	17.2	16.7	18.0
81°	3.3	12.8	14.3	15.4	15.0	16.3
82°	2.3	11.0	12.6	14.5	13.5	15.0
83°	1.0	9.1	10.9	11.4	11.6	12.8
84°	0.0	7.4	9.2	10.5	9.9	10.1
85°	0.0	6.3	7.0	8.9	8.8	8.6
86°	0.0	4.4	4.9	6.9	6.9	7.8
87°	0.0	2.7	4.5	6.2	5.1	6.7
88°	0.0	1.3	3.4	4.5	4.1	5.5
89°	0.0	0.0	1.7	3.3	2.9	4.3



TEST NUMBER: P851812
 CATALOG NUMBER: RLFRC4FS-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	1.8	1.5	2.2
91°	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P851812
CATALOG NUMBER: RLFRC4FS-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P851812
CATALOG NUMBER: RLFRC4FS-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
180°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)